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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,934	08/28/2006	Tadashi Katafuchi	293941US0X PCT	2739

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EXAMINER	
GOLOBOY, JAMES C	
ART UNIT	PAPER NUMBER
1771	

NOTIFICATION DATE	DELIVERY MODE
01/30/2012	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/590,934	KATAFUCHI, TADASHI	
	Examiner	Art Unit	
	JAMES GOLOBOY	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 November 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1,3-6,8,10-14,16,18 and 21* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1, 3-6, 8, 10-14, 16, 18, 21* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendments filed 11/22/11 overcome the rejections set forth in the office action mailed 8/24/11. New grounds of rejection necessitated by the amendments are set forth below.

Claim Rejections - 35 USC § 103

2. Claims 1, 3-6, 8, 10-13, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komiya (U.S. PG Pub. No. 2003/0220206).

In paragraphs 15-18 Komiya discloses a lubricating composition. The composition comprises a lubricating base oil, as recited in claim 1, and a modified succinimide, which can be a monosuccinimide. In paragraphs 17 and 29 Komiya discloses that the monosuccinimide is substituted with a hydrocarbon group of 8 to 30 carbon atoms, which can be an alkyl group. The moleculae weight of these alkyl groups having 8 to 30 carbon atoms overlaps the range recited for component (A) of claim 1. In paragraph 34 Komiya discloses that the monosuccinimide can be borated as recited in component (A) of claim 1. In paragraph 47 Komiya discloses that the monosuccimide is preferably present in an amount of 0.01 to 6% by weight, overlapping the range recited for component (A) of claim 1. In paragraphs 57-58 Komiya discloses that the composition can further comprise 0.1 to 10% by weight an ashless succinimide dispersant substituted with an alkenyl group having 60 to 350 carbon atoms, leading to a molecular weight overlapping the range recited for component (B) of claims 1 and 13. While Komiya discloses that the succinimide dispersant is preferably borated, disclosed examples and preferred embodiments do not constitute a teaching away from a broader

disclosure or nonpreferred embodiments. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). The succinimides of Komiya therefore meet the limitations of components (A) and (B) of claim 1. In paragraph 40 Komiya discloses that boric acid is preferably reacted with the monosuccimide in a mole ratio of at least 0.9:1, leading to a boron content meeting the limitations of claims 1 and 4. In paragraph 56 Komiya discloses that a metal-based detergent preferably supplies less than 0.05% by weight of alkaline metal to the composition. As there are no additional required ash-producing components, the sulfated ash content of the composition of Komiya will meet the limitations of claim 1.

The ratio of monosuccinimide to succinimide dispersant in the composition of Komiya ranges from 0.001 (0.01/10) to 60 (6/0.1), encompassing the range recited in claim 3. While Komiya does not specifically disclose any additives as antiwear agents, the phosphorus-containing additives of paragraph 64 will act as antiwear agents meeting the limitations of claim 5, and the sulfur-containing extreme pressure agents of paragraph 66 will act as ashless antiwear agents as recited in claims 5-6. In paragraph 48 Komiya discloses that the metal-containing detergents are optional (“may be added”), and Komiya therefore also teaches compositions comprising no metals, as recited in claim 8. Note that inventive examples 1-13 in Table 1 are also free of metal-containing detergent. The boron content and mixing ratios discussed above overlap or encompass the range recited in claim 10, and in paragraph 27 Komiya teaches that the viscosity of the base oil preferably overlaps the range recited in claim 10. The use of boric acid as a reactant in borating the monosuccinimide of Komiya meets the limitations of claim 18. In paragraph 50 Komiya discloses that unmodified succinimide

can be present in the composition as a friction modifier; when this unmodified succinimide is a monosuccinimide, it will meet the limitations of claim 11 for the case where A is an amino group bound to the remainder of the succinimide through the nitrogen atom. The boron-modified monosuccinimides of Komiya meet the limitations of claim 12 for the same case. In paragraph 55 Komiya discloses that the concentration of friction modifier ranges from 0.01 to 5% by mass. When the friction modifier is the unmodified monosuccinimide, it will meet the limitations of claim 21.

The only difference between the compositions of Komiya and the claimed composition is that some of the ranges of Komiya overlap or encompass the claimed ranges rather than falling within them. See MPEP 2144.05(I): “In the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976);” Claims 1, 3-6, 8, 10-13, 18, and 21 are therefore rendered obvious by Komiya.

3. Claims 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Komiya in view of Nibert (U.S. Pat. No. 5,916,852)

The discussion of Komiya in paragraph 2 above is incorporated here by reference. Komiya discloses an anti-shudder transmission fluid comprising an ashless succinimide dispersant. Komiya discloses in paragraph 58 that the succinimide dispersant can be a mono- or bissuccinimide, but does not disclose specific suitable succinimides.

In column 3 lines 38-49 Nibert discloses a method of reducing shudder in transmissions comprising the use of a transmission fluid including an ashless dispersant. In columns 10-12 Nibert discusses the ashless dispersants, which can be succinimides substituted by a polyisobutylene having a molecular weight of 800 to 2000 (column 12 lines 4-9), and where the polyamine reactant can be diethylene triamine, triethylene tetramine, and tetraethylene pentamine (column 11 lines 11-13). Depending on the reactant ratios, these dispersants will meet the limitations of the monosuccinimides of claim 14 or the bissuccinimides of claim 16.

It would have been obvious to one of ordinary skill in the art to use the ashless dispersants of Nibert as the ashless dispersants in the composition of Komiya, as Nibert teaches that they are suitable ashless dispersants for use in anti-shudder transmission fluids.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Buitrago (U.S PG Pub. No. 2006/0135375) discloses monosuccinimide and bissuccinimide dispersants for anti-shudder transmission fluids.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES GOLOBOY whose telephone number is (571)272-2476. The examiner can normally be reached on M-F 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James Goloboy/
Primary Examiner, Art Unit 1771